





IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re App	lication	of
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James Allen Cox et al.

Serial No.:

Filed:

For:

December 29, 2000 Group Art Unit 2872

RESONANT REFLECTOR FOR USE WITH OPTOELECTRONIC DEVICES

1100.1130101 (H16-25181)

Docket No.:

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

CERTIFICAT States Postal S	FE UND! Service o	ER 37 C.F.R on the date sho	. 1.8: I he own belov	ereby certify the with sufficient	hat this con ent postage	responde as first o	ence is being of lass mail in a	deposited with t n envelope add	he United ressed to
San Asia Amerika Antara Maria Antara Antara Antara				signer for Pat		ington,	D.C. 20231, o		
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		1 1.	pt of	Brian N	Tufte				

we are transmitting herewith the attached:

1	Amendment

No additional fee required

The fee has been calculated as shown:

		CLAIMS A	AS AMENI	DED			
	(3)	(4)	(5)	SMALL ENTITY		OTHER	
	REMAINING CLAIMS	HIGHEST PAID	EXTRA	RATE	ADD'L FEE	RATE	ADD'L FEE
TOTAL CLAIMS	-	_		x9=	\$	x18=	\$
INDEPEN- DENT CLAIMS	-	=		x39=	\$	x78=	\$
() FIRST MULTIPLE DEPENDENT CLAIM				+130=	\$	+260=	\$
TOTAL	\$		\$				







A check in the amount of \$_____ is enclosed.

Small entity status of this application under 37 C.F.R. 1.9 and 1.27 has been established by verified statement previously submitted.

[X] Other: Information Disclosure Statement, PTO Form-1449 and cited references

Please charge any deficiencies or credit any overpayment in the enclosed fees to Deposit Account No. 50-0413.

By:

Brian M. Tufte

Reg. No. 38,638

Brian N. Tufte CROMPTON, SEAGER & TUFTE, LLC 331 Second Avenue South Suite 895 Minneapolis, Minnesota 55401-2246

Telephone: (612) 677-9050 Facsimile: (612) 359-9349

MAY 3 | 2001



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

James Allen Cox et al.

Serial No.:

09/751,422

Examiner Unknown

#4/IDS 6/22/01 C.McKinney

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For:

RESONANT REFLECTOR FOR USE WITH OPTOELECTRONIC DEVICES

Docket No.:

1100.1130101 (H16-25181)

Assistant Commissioner for Patents Washington, D.C. 20231

HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL IL IN AN ENVELOPE SERVICE AS FIRST CLASS) ADDRESSED TO: ASSISTANT ATENTS, WASHINGTON, D.C.

Dear Sirs:

INFORMATION DISCLOSURE STATEMENT

Pursuant to the obligations of candor and good faith imposed by 37 C.F.R 1.56, the documents listed on the attached PTO-1449 are hereby disclosed.

No representation is intended to be made hereby that any of the cited references establishes, by itself or in combination with other information, a prima facie case of unpatentability of any claim of the present case.

Respectfully submitted,

By their attorney

James Allen Cox &

Dated: 1 25 2001

Brian/N. Tufte,/Reg. No. 38,638

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FORM PTO-1449 MAY 2 8 2000 2	Atty. Docket No.: 1100.1130101 (H16-25181)	Serial No.: 09/751,422	
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANTS TO THE PROPERTY OF THE PROPERT	Applicant: James Allen Co	x et al.	
APPLICANTS TO THE APPLICANTS TO THE APPLICANT STATEMENT	Filing Date	Group Art:	
	December 29, 2000	2872	

U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
AA	4,317,085	02/23/1982	Brunham et al.	372	50	
AB	4,466,694	08/21/1984	MacDonald	385	37	
AC	4,660,207	04/21/1987	Svilans	372	45	
AD	4,784,722	11/15/1988	Liau et al.	156	649	
AE	4,885,592	12/05/1989	Kofol et al.	343	753 7 5 4	
AF	4,901,327	02/13/1990	Bradley /	372	45	
AG	4,943,970	07/24/1990	Bradley	372	45	
AH	4,956,844	09/11/1990	Goodhue et al.	372	44	
AI	5,031,187	07/09/1991	Orenstein et al.	372	50	
AJ	5,052,016	09/24/1991	Mahbobzadeh	372	96	
AK	5,056,098	10/08/1991	Anthony et al.	372	45	
AL	5,062,115	10/29/1991 /	Thornton	372	50	6
AM	5,068,869	11/26/1991	Wang et al.	372	45	RE MAY
AN	5,115,442	05/19/1992	Lee et al.	372	45 \$	ξ ω ()
AC	5,140,605	08/18/1992	Paoli et al.	372	50 🖹	1 2
AP	5,158,908	10/27/1992	Blonder et al.	43 % ′	32 ₁₂₉ 8	2001
AQ	5,216,263	06/01/1993	Paoli	257	88	
AR	5,216,680	06/01/1993	Magnusson et al.	372	20	
AS	5,237,581	08/17/1993	Asada et al.	372	45	
AT	5,245,622	09/14/1993	Jewell et al.	372	45	
AU		11/02/1993	Olbright et al.	372	46	
AV		02/08/1994	Tabatabaie	372	92	
AV	5,293,392	03/08/1994	Shieh et al.	372	45	
AX	5,317,170	05/31/1994	Paoli	257	88	
AY		05/31/1994	Ackley et al.	372	45	

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



FORM PTO-1449

LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT

Atty. Docket No.: 1100.1130101 (H16-25181)

Serial No.: 09/751,422

Applicant: James Allen Cox et al.

Filing Date Group Art:

December 29, 2000

2872

Exam Initi		Document No.	Date	Name	Class	Sub Class	Filing Date If Appropriate
	ΑZ	5,325,386	06/28/1994	Jewell et al.	/372	50	
	BA	5,331,654	07/19/1994	Jewell et al.	372	45	
	BB	5,337,074	08/09/1994	Thornton	₃₄₆ 347	1 07K	
	BC	5,349,599	09/20/1994	Larkins	372	50	
	BD	5,351,256	09/27/1994	Schneider et al.	372	45	
	BE	5,359,447	10/25/1994	Hahn et alx	359	154	
	BF	5,359,618	10/25/1994	Lebby et al.	372	45	
	BG	5,363,397	11/08/1994	Collins et al.	372	92	
	ВН	5,373,520	12/13/1994	Shoji et al.	372	45	
	BI	5,404,373	04/04/1995	Cheng	372	50	
allow	BJ	5,416,044	05/16/1995	Chino et al.	438	₁₂₉ 39	70
-01	BK	5,428,634	06/27/1995	Bryan et al.	372	45	RE MAY 2800
	BL	5,446,754	08/29/1995	ewell et al.	372	50	
	BM	5,475,701	12/12/1995	Hibbs-Brenner	372	50	
	BN	5,513,202	04/30/1996	Kobayashi et al.	372	96 ह	VE (
	во	5,530,715	06/25/199/5	Shieh et al.	372	96	
	BP	5,555,255	09/10/19/96	Kock et al.	372	96	
	BQ	5,557,626	09/17/1/996	Grodinski et al.	372	45	
	BR	5,561,683	10/01/1996	Kwon	372	96	
	BS	5,568,499	10/2 2 /1996	Lear	372	45	
	вт	5,598,300	01/28/1997	Magnusson et al.	359	566	
	BU	5,606,572	02/25/1997	Swirhun et al.	372	96	
	BV	5,642,376	06/24/1997	Olbright et al.	372	45	
	BW	5,727,013	03/10/198	Botez et al.	372	96	
	BX	5,774,487 (06/30/1998	Morgan	372	45	

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LIST OF PATENTS AND PUBLICATIONS	Applicant: James Alle	en Cox et al.
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Examiner Initial	Document No.		Date		Name	Class	Sub Class	Filing Date If Appropriate
ву	5,778,018	07/	07/1998	Yo	shikawa et al.	372	45	
BZ	5,818,066	10/	06/1998	Du	boz	257/	21	
CA	5,903,590	05/	11/1999	Ha	dley et al.	3/12	96	
СВ	5,940,422	08/	17/1999	Joh	nson	/372	45	70.
СС	5,978,401	11/	02/1999	Mo	organ /	372	50	∾
CD	6,055,262	04/	25/2000	Co	x et al.	372		RE MAI
,			FOREI	GN P	PATENT DOCUMEN	TS	_	CEIVI
	Document No	•	Date		Ountry	Class	Sub E Class	Translation Yes No
CE	JP 5-299779		11/12/19	93	Japan			Yes
	T				uthor, Title, Date, Pert			
CF	Banwell et al., "VCSE Laser Transmitters for Parallel Data Links", <u>IEEE Journal of Quantum Electronics</u> , Vol. 29, No. 2, February 1993, pp. 635-644.							
CG	Catchmark et al., "High Temperature CW Operation of Vertical Cavity Top Surface-Emitting Lasers", CLEO 1993, p. 138. (No Mary)							
СН	Chemla et al., "Nonlinear Optical Properties of Semiconductor Quantum Wells", Optical Nonlinearities and Instabilities in Semiconductors, Academic Press, Inc., Copyright 1988, pp. 83-120. (no month)							
CI	Choa et al., "High-Speed Modulation of Vertical-Cavity Surface-Emitting Lasers", <u>IEEE Photonics</u> Technology Letter, Vol. 3, No. 8, August 1991, pp. 697-699.							
Cl	G. G. Ortiz, et al., "Monolithic Integration of In0.2 GA0.8As Vertical Cavity Surface-Emitting Lasers with Resonance-Enhanced Quantum Well Photodetectors", <u>Electronics Letters</u> , Vol. 32, No. 13, June 20, 1996, pp. 1205-1207.							
CK	Graf, Rudolph, <u>M</u> 1984, p. 694.		n Dictiona	ary of	f Electronics, 6 th ed., In	ndiana: Hov	ward W. Sa	ms & Company,
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Jewell et al., "Surface Emitting Microlasers for Photonic Switching & Intership Connections", Optical Engineering, Vol. 29, No. 3, pp. 210-214, March 1990.

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CM	Jewell et al., "Surface-Emitting Microlasers for Photonic Switching and Interchip Connections", Optical Engineering, Vol. 29, No. 3, March 1990, pp. 210-214.
CN	Kishino et al., "Resonant Cavity-Enhanced (RCE) Photodetectors", <u>IEEE Journal of Quantum Electronics</u> , Vol. 27, No. 8, pp. 2025-2034.
\bigcirc	Kuchibhotla et al., "Low-Voltage High Gain Resonant Cayity Avalanche Photodiode", IEEE Phototonics Technology Letters, Vol. 3, No. 4, pp. 354-356.
(P)	Lai et al., "Design of a Tunable GaAs/AlGaAs Multiple-Quantum-Well Resonant Cavitys Photodetector", IEEE Journal of Quantum Electronics, Vol. 30, No. 1, pp. 108-1145
(S)	Lee et al., "Top-Surface Emitting GaAs Four-Quantum-Well Lasers Emitting at 0-85 uper, Electronics Letters, Vol. 24, No. 11, May 24, 1990, pp. 710-711.
CR	Lehman et al., "High Frequency Modulation Characteristics of Hybrid Dielectric/AlGaAs Mirror Singlemode VCSELs", Electronic Letters, Vol. 31, No. 15, July 20, 1995, pp. 1251-1252.
CS	Miller et al., "Optical Bistability Due to Increasing Absorption", Optics Letters, Vol. 9, No. 5, May 1984, pp. 162-164.
СТ	Morgan et al., "200 C, 96-nm Wavelength Range, Continuous-Wave Lasing from Unbonded GaAs MOVPE-Grown Vertical Cavity Surface-Emitting Lasers", <u>IEEE Photonics Technology Letters</u> , Vol. 7, No. 5, May 1995, pp. 441-443.
CU	Jiang et al., "High-Frequency Polarization Self-Modulation in Vertical-Cavity Surface-Emitting Lasers", Appl. Phys. Letters, Vol. 63, No. 26, December 27, 1993, pp. 2545-2547.
CV	Morgan et al., "High-Power Coherently Coupled 8x8 Vertical Cavity Surface Emitting Laser Array", Appl. Phys Letters, Vol 61, No. 10, September 7, 1992, pp. 1160-1162.
CW	Morgan et al., "Hybrid Dielectric/AlGaAs Mirror Spatially Filtered Vertical Cavity Top-Surface Emitting Laser", Appl. Phys. Letters, Vol. 66, No. 10, March 6, 1995, pp. 1157-1159.
CX	Morgan et al., "Novel Hibrid-DBR Single-Mode Controlled GaAs Top-Emitting VCSEL with Record Low Voltage", 2 pages, dated prior to December 29, 2000.
CY	Morgan et al., "Progress and Properties of High-Power Coherent Vertical Cavity Surface Emitting Laser Arrays", SPIE, Vo. 1850, January 1993, pp. 100-108.
CZ	Morgan et al., "Progress in Planarized Vertical Cavity Surface Emitting Laser Devices and Arrays", SPIE, Vol. 1562, July 1991, pp. 149-159.
DA	Morgan et al., "Submilliamp, Low-Resistance, Continuous-Wave, Single-Mode GaAs Planar Vertical-Cavity Surface Emitting Lasers", Honeywell Technology Center, June 6, 1995.

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RM PTO-1449	MAY 2 9 2001 2	Atty. Docket No.: 1100.1130101 (H16-25181)	Serial No.: 09/751,422
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DB	Morgan et al., "Transverse Mode Control of Vertical-Cavity Top-Surface Emitting Lasers", <u>IEEE Photonics Technology Letters</u> , Vol. 4, No. 4, April 1993, pp. 374-377.
DC	Morgan et al., "Vertical Cavity Surface Emitting Laser Arrays: Come of Age,", Invited paper, SPIE, Vol. 2683-04, OE LASE 96; Photonics West: Frabrication, Testing and Reliablity of Semiconductor Lasers, (SPIE< Belling Man, WA, 1996).
DD	Morgan et al., "Vertical-Cavity Surface-Emitting Laser Arrays" SPIE, Vol. 2398, February 1995, pp. 65-93.
DE	Morgan, "High-Performance, Producible Vertical Cavity Lasers for Optical Interconnects", High Speed Electronics and Systems, Vol. 5, No. 4, December 1994, pp. 65-95.
DF	Morgan, "Transverse Mode Control of Vertical-Cavity Top-Surface Emitting Lasers", <u>IEEE Phot.</u> Tech. Lett., Vol. 4, No. 4, p. 374, April 1993.
DG	Nugent et al., "Self-Pulsations in Vertical-Cavity Surface-Emitting Lasers", <u>Electronic Letters</u> , Vol. 31, No. 1, January 5, 1995, pp. 43-44.
DH	U.S. Patent Application Serial No. 09/751,423, filed December 29, 2000, entitled "Spatially Modulated Reflector for an Optoelectronic Device".

TC 2800 MAIL ROOM

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EXAMINER:

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